

Autobiographical Memory and Body Image in Female Athletes

Ava Lu '21

Faculty Advisor : Alisha Holland, PhD
Department of Psychology



Trinity College
HARTFORD CONNECTICUT

Background

- Body image** is defined as the subjective perception of one's body, and how one views oneself based on physical appearance.
- Autobiographical memory** is personal and emotional past experiences that encompass our perceptions of who we are. These memories have a strong emotional component that can influence how events are remembered and recalled, and thus inform our self-identity (i.e., self-perception of one's identity).
- Athletic identity is at the core of how athletes see themselves. This is because athletic involvement, that is, whether having current or former athletic participation, can pose different effects on how female athletes remember past body related events and their current body image.
- Female athletes are often expected to maintain a certain body type to maximize athletic performance. Prior research also suggests that female athletes are more likely to have negative body image and they are among one of the high-risk populations of developing eating disorders (Kong & Harris, 2015).

Objectives

- The present study aimed to examine the relationship between athletic status (i.e., former vs. current female athletes) and recollection of emotional body image related memories. Specifically, the study sought to investigate the difference of experienced emotions in remembering and recalling body image related past events between the 2 athlete groups.
- The present study intended to investigate the effect of athletic status on female athletes' current body image.
- The current study also sought to understand the interaction between emotion and body image. Particularly, the study aimed to examine whether there was a correlation between emotional level of memory recall and female athletes' body perceptions.

Hypotheses

Hypothesis 1: Compared to former female athletes, current athletes will experience higher levels of emotion in recalling and narrating body image related memories.

Hypothesis 2: Current female athletes will report higher levels of negative body image than former female athletes.



Methods and Procedure



1: Cue Word Task

2: Memory Ratings

3: Narrative Task

4: 5-Minute Puzzle Task

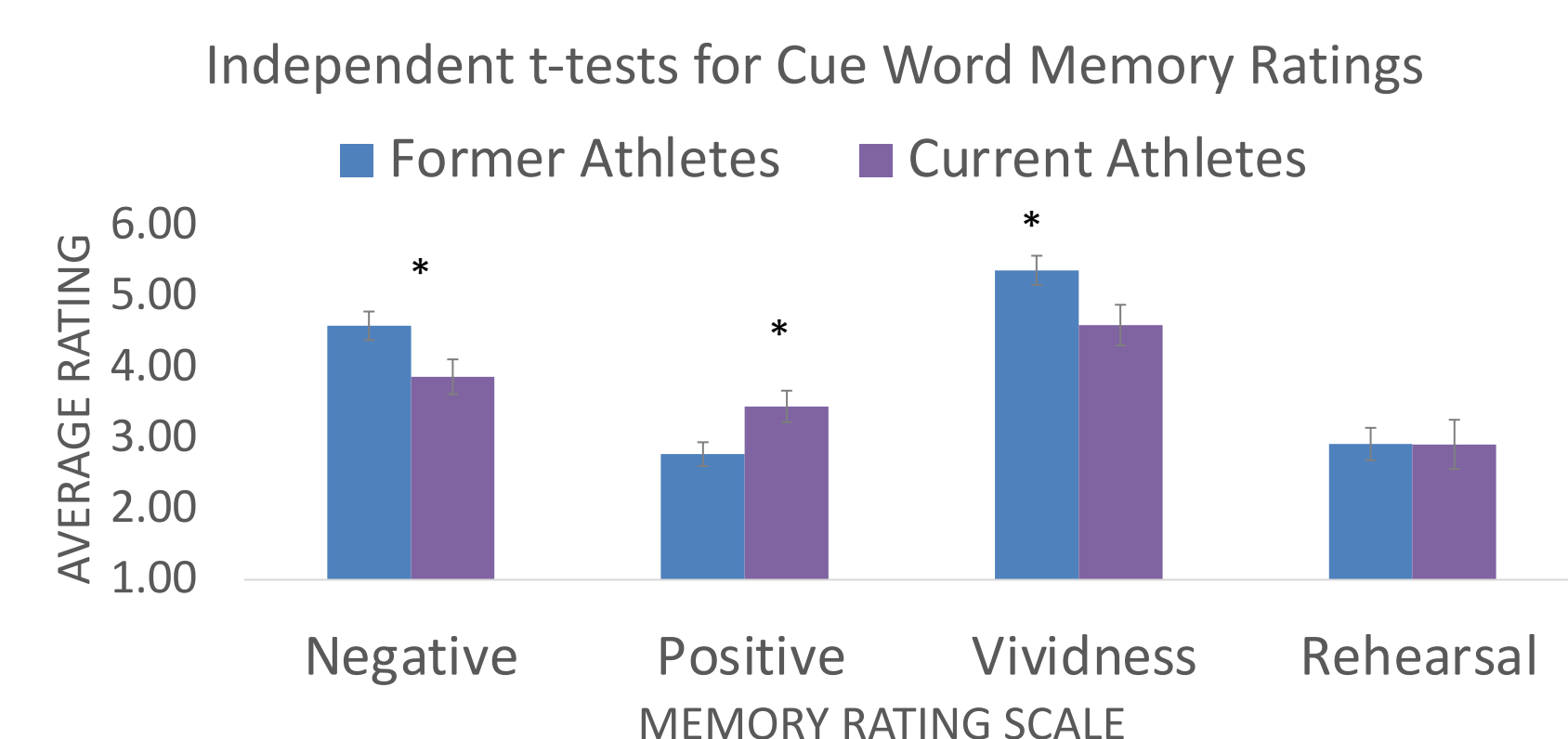
5: Self-Disgust Eating Disorders Scale (SDES)

Section	1	2	3	4	5
Description	Participants were asked to recall a specific memory or event that reminded them of each of the 10 preselected body image related cue words. Participants were asked to write a brief title for each memory/cue word.	For each memory/cue word, after a title has been written, participants were asked to rate how they felt emotionally (i.e., negative and positive), and 3 other questions about the vividness, rehearsal, and age of occurrence of the memory. The ratings were presented on a 7-point rating scale (0-6).	Participants were asked to write a narrative for each of the 3 most emotional memories of their choice.	In this task, participants were asked to group 16 different animals into 4 groups. The purpose of this task was to reduce the priming effect of emotions on body image questionnaire that was followed.	Participants were asked about how participants perceive their bodies. This questionnaire contains 16 statements related to body image; participants were asked about how much they agreed with each item. The rating scale was 1-7.
Examples	A list of 10 cue words included: Attractive, Skinny, Plump, Heavy, Slender, Chubby, Muscular, Ugly, Sporty, and Thick.	"How negative do you feel as you recall the event?" "How positive do you feel as you recall this event?" "How vivid is the memory?"	"You will be asked to choose the 3 most emotional events from the 10 events that you've written titles for previously."	Some animals were "Cat," "Octopus," "Giraffe," some groups were "Mammals" and "Invertebrate."	"I accept the way I look." "Parts of my body are foul." "It sickens me to look at myself."

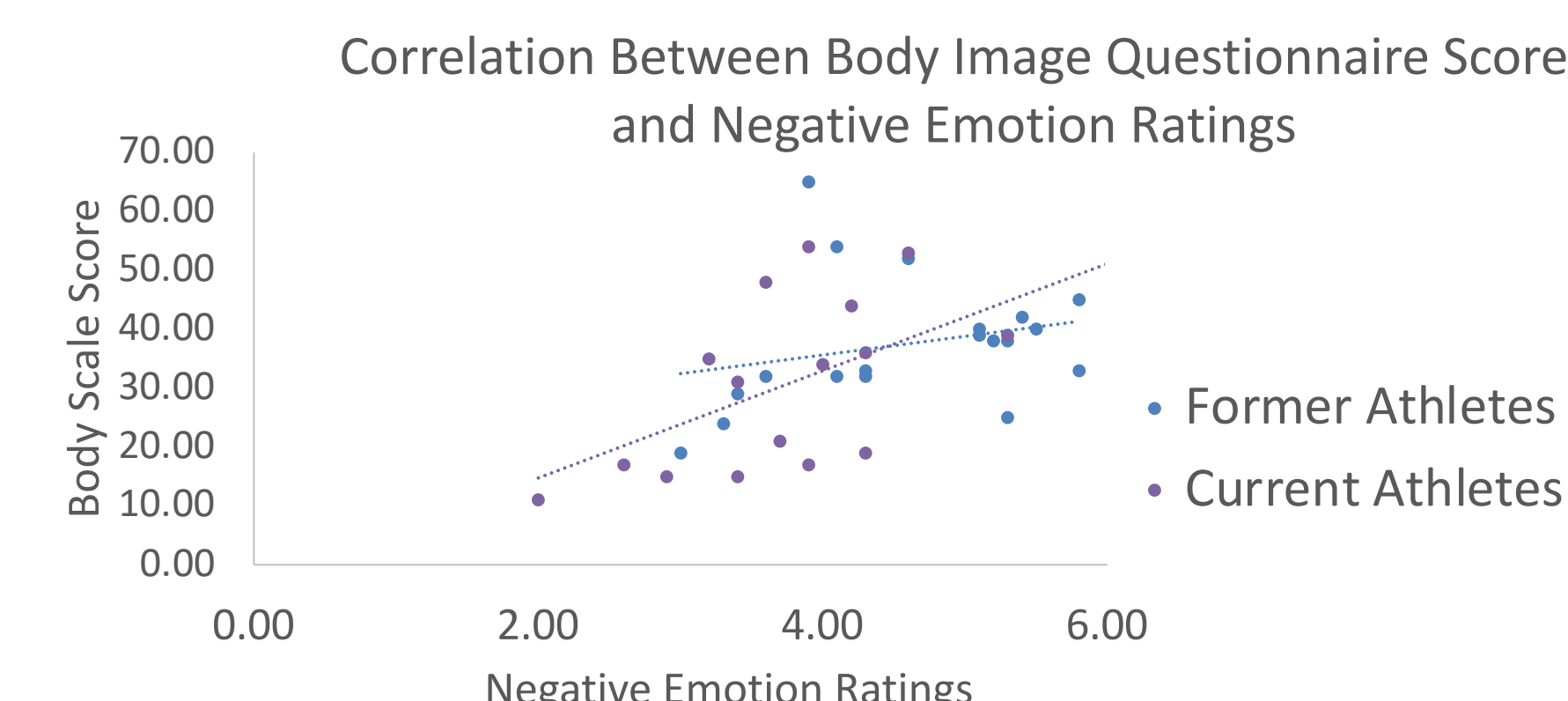
The current study was anonymous. The survey was distributed using an anonymous Qualtrics link, participants could choose to receive course research credit for their participation.

On a demographic questionnaire, 19 participants identified as former athletes and 17 participants were current athletes.

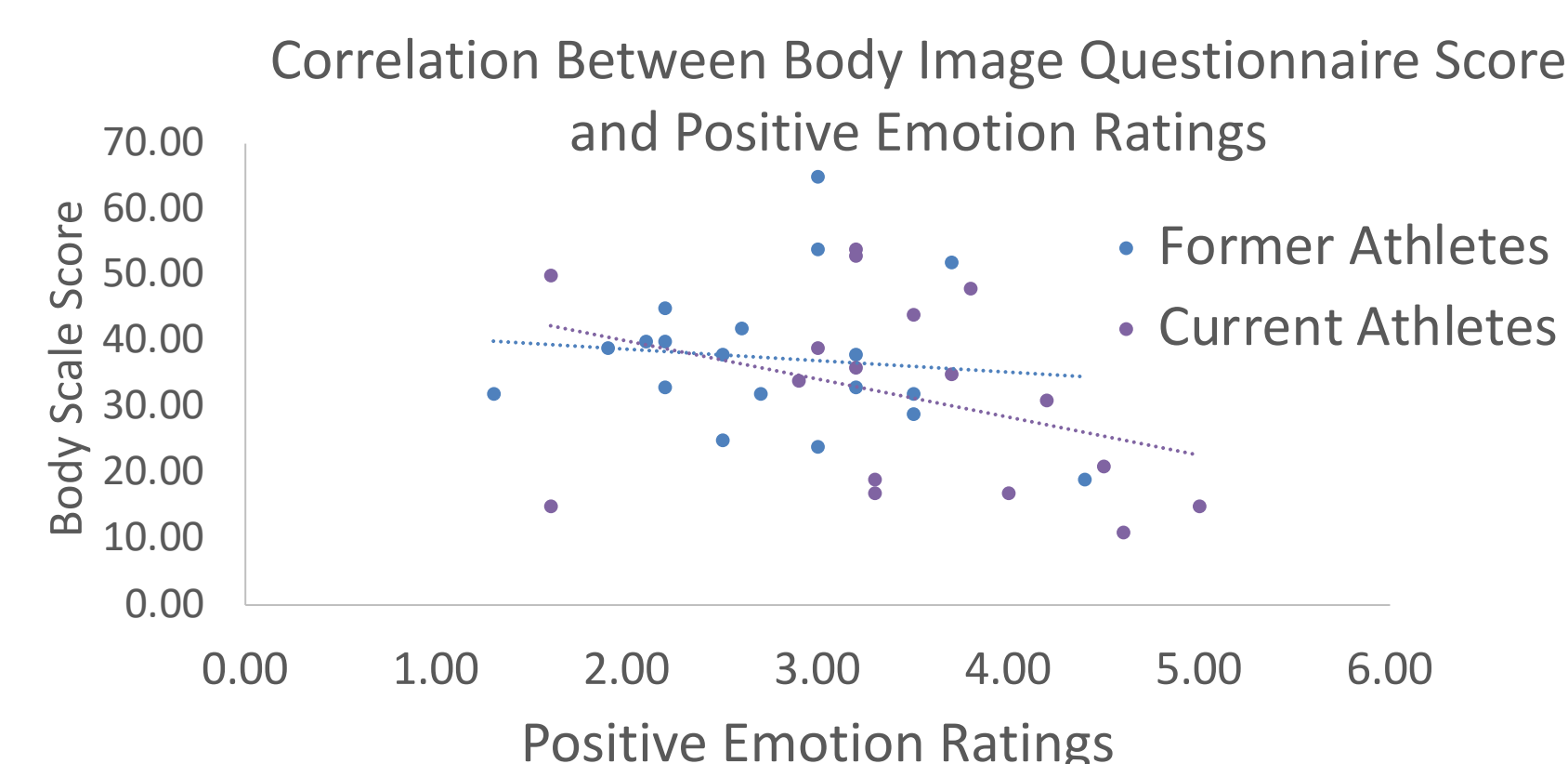
Results



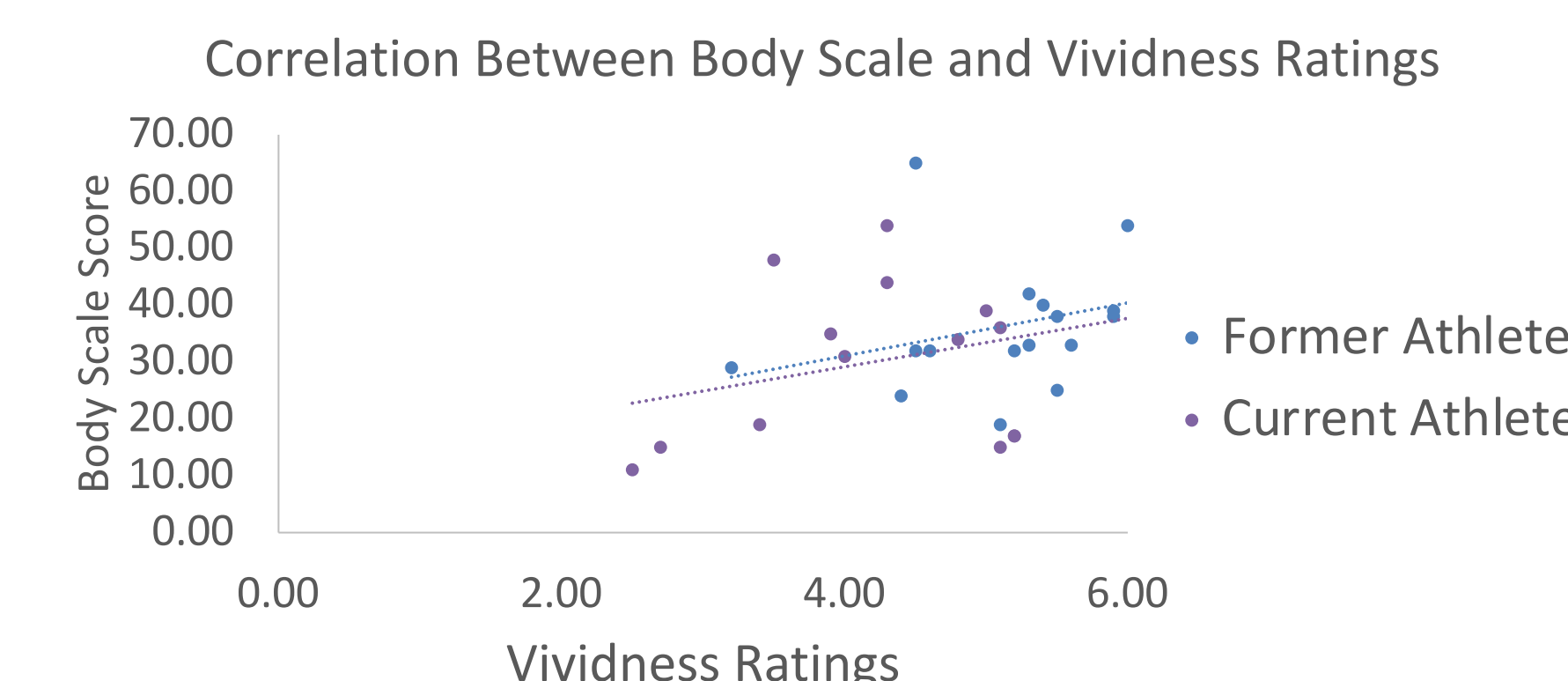
Former athletes reported higher levels of negative emotions and vividness at the time of memory recall, $p < .05$. Current athletes reported higher levels of positive emotions, $p < .05$.



Negative emotion memory ratings had a strong positive correlation with Body Image Questionnaire score across groups, $r(34) = .51, p < .01$.



A trending negative correlation was found between Body Image Questionnaire score and positive emotion ratings, $r(34) = -.32, p = .06$.



Vividness ratings of memory recall were found to have a strong positive correlation with Body Image Questionnaire score, $r(34) = .40, p < .05$.

Discussion

Main Findings

- Emotion During Memory Recall:** Inconsistent with our hypothesis, former athletes reported a significantly higher level of negative emotion while current athletes showed significantly more positive emotions in recalling body image related memories.
- Body Image:** Results showed that former female athletes had a more negative view of their bodies than current athletes. This result did not support our hypothesis, and it was not statistically significant.
- Memory Vividness:** Former athletes reported to recall body image related memories more vividly than current athletes. Vividness of memory also had a statistically significant positive correlation with body image score.
- Narrative Task:** Results showed that there was no statistically significant difference between former and current athletes in how they narrated body image related emotional memories. Our hypothesis was not supported.
- Negative emotions during memory recall were found to be positively correlated with negative body image in both athlete groups, though the correlation was stronger for current athletes.

Interpretations

- Negative experiences related to physical appearance can prompt people to evaluate oneself and one's identity negatively. This may partially explain why former female athletes also had more negative perception of their bodies while reported a higher level of negative emotions.
- Former athletes may have a higher level of body dissatisfaction than current athletes because they are more preoccupied with the mismatch between the social ideal of body both inside and outside of sports that appreciate different body types.

Limitations

- Small sample size with predominantly college aged white population
- Too few non-athletic participants
- Information provided by online survey and questionnaire could be subjected to personal biases

Future Research

- The future study would benefit from testing larger and more diverse populations
- Testing using in-person autobiographical memory retrieval test
- Expand research to recreational athletes

Acknowledgements

- I would like to extend my deepest gratitude to Professor Alisha Holland for guiding me and supporting me in every step throughout this entire thesis project.
- I would like to thank Professor Amie Senland and Senior Thesis Colloquium for organizing and providing many resourceful instructions along the way.
- I would like to thank Dave Tatem for helping me set up a Qualtrics survey.
- I would also like to give a special thank you to Brenda Piedras '21 for endless tech support and moral support.

*References upon request.